

MEMO

To: Michael Torres, Remedial Project Manager, United States Environmental Protection Agency

From: Scott Lindenmuth, Technical Coordinator, SBA Shipyard PRP Group

CC: Beth Hesse, Project Coordinator, SBA Shipyard PRP Group
Tommy Doran, Louisiana Department of Environmental Quality
I-Jung Chiang, United States Environmental Protection Agency
Blake Atkins, United States Environmental Protection Agency

Date: November 15, 2018

Re: Bi-Monthly Progress Report #1; September – October 2018
Remedial Investigation/Feasibility Study
SBA Shipyard Superfund Site, Jennings, Jefferson Parish, Louisiana
EPA ID: LAD008434185

EHS Support LLC (“EHS Support”), on behalf of the SBA Shipyard Potentially Responsible Party (PRP) Group (PRP Group), is providing this Bi-Monthly Progress Report associated with Remedial Investigation and Feasibility Study activities being conducted at the SBA Shipyard Superfund Site located in Jennings, Jefferson Davis Parish, Louisiana (Site). This progress report is being provided in accordance with the Administrative Settlement Agreement and Order on Consent for Remedial Investigation/Feasibility Study (Settlement Agreement) between the United States Environmental Protection Agency (USEPA) and PRP Group Respondents dated October 25, 2016; amended March 7, 2018. Activities completed during September and October 2018 are summarized in the following sections.

Description of Actions Taken to Comply with Settlement Agreement

Actions taken during September and October 2018 to comply with the Settlement Agreement consisted of implementing activities described in the Remedial Investigation (RI)/Feasibility Study (FS) Work Plan, dated May 17, 2018 (Work Plan) and approved by USEPA on July 19, 2018. EHS Support, on behalf of the PRP Group, mobilized to the Site on September 25, 2018 to perform the following activities described in the Work Plan. Activities described below were completed between September 25 and September 28.

- A site-wide topographic survey was completed by a professional land surveyor (PLS) licensed to work in the State of Louisiana. Global positioning system (GPS) coordinates were taken of the land surface and key site features, such as remaining structures, footprints of the boiler barge and partially buried barge, and the onsite drainage features that bisects the southern portion of the Site. The survey also included mapping the black asphaltic-like material that is present at ground surface.
- Activities were completed to prepare the Site for RI fieldwork including mowing of tall grass and brush and improving the primary access road that transects the property.



- Ground penetrating radar (GPR) and electromagnetic (EM) surveying services were provided to ensure subsurface boring and monitoring well locations were clear from underground utilities, piping, or other subsurface features that could present a hazard during drilling. A GPR/EM survey was also conducted in Investigation Area of Interest 4 (IAC-4) (**Attachment A**) to identify possible anomalies that could be related to former landfilling.
- A habitat reconnaissance survey and sample location viability assessment were completed by a qualified EHS Support ecologist. The habitat reconnaissance survey was conducted across the Site to provide qualitative descriptions of available habitat that will be used to confirm and/or update the preliminary Conceptual Exposure Model (CEM), which was previously provided as part of the Preliminary Conceptual Site Model (CSM) (RI/FS Work Plan; Appendix A).

The reconnaissance resulted in converting six proposed soil sample locations to sediment/surface water sample locations based on observations of vegetation and soil, which were consistent with wetland conditions. Four of these locations are within IAC-4 and two locations are in the western adjacent property. Two additional sediment sample locations were added to the sampling program within the northern portion of the drainageway based on observations made during the reconnaissance. Sediment and surface water samples were collected in accordance with methodology and analytical program detailed in the Work Plan. An additional Investigation Area of Interest (IAI-8) was identified and added to the sampling program to account for the sediment and surface water sampling locations located on the western adjacent property and two new sediment/surface water sample locations located in the drainageway. Figures illustrating the sample locations that were converted from soil to sediment/surface water sample locations and the footprint of IAI-8 are provided in **Attachment B**.

A second deployment was initiated on October 8, 2018 to initiate the sampling program described in the Work Plan. The activities described below were completed between October 8 and 17, 2018.

- Completed the systematic soil sampling program in accordance with the Work Plan.
- Completed a portion of the judgmental soil sampling program in accordance with the Work Plan.
- Completed the sediment and surface water sampling program in accordance with the Work Plan.

A third deployment was initiated on October 23 to complete the sampling program and remaining tasks outlined in the Work Plan. The activities described below were completed between October 23 and November 2, 2018.

- Completed the remaining portion of the judgmental soil sampling program in accordance with the Work Plan.
- Collected soil property analysis samples of coarse- and fine-grained deposits from two locations onsite in accordance with the Work Plan. One location was within IAC-3 and one location was within IAC-4.
- Completed installation of 10 monitoring wells in accordance with the Work Plan. All monitoring wells (both existing and newly installed) were developed and sampled in accordance with the Work Plan with the exception of existing monitoring well (MW)-2, which contained a small amount of non-aqueous phase liquid (NAPL).
- Completed installation of six surface water staff gauges in accordance with the Work Plan.



- Installed 14 pressure transducers. Thirteen transducers were installed in monitoring wells. The remaining transducer was installed at the staff gauge located adjacent to MW-5 in IAI-1.
- Samples of the black asphaltic-like material present at the surface were collected at several locations across the Site in accordance with the Work Plan.
- Post-investigation surveying was completed by a PLS licensed to work in the State of Louisiana. GPS coordinates and elevations for all soil borings, monitoring wells, and surface water staff gauges were surveyed in accordance with the Work Plan. Sediment and surface water sample location coordinates were collected by EHS Support personnel during sample collection using Differential GPS (DGPS) due to difficulty of access by the PLS and to ensure accuracy over open water.

Sample count totals per media collected during the RI fieldwork is provided in the following table:

Analysis	Soil	Sediment	Surface Water	Groundwater	Black Asphaltic Material
Volatile Organic Compounds (VOCs)	135	55	36	14	6
Polycyclic Aromatic Hydrocarbons (PAHs)	310	159	36	14	0
Semivolatile Organic Compounds (SVOCs)	24	0	0	0	6
Metals	334	159	36	14	0
Acid Volatile Sulfide / Simultaneously Extracted Metals (AVS/SEM)	0	55	0	0	0
Volatile Petroleum Hydrocarbons / Extractable Petroleum Hydrocarbons (VPH-EPH)	0	0	0	0	6
Geochemical / Physical Property Analyses ⁽¹⁾	334	159	36	14	0
Polychlorinated Biphenyls (PCBs)	0	3	0	0	0
Dioxins	0	3	0	0	0
Totals (distinct sample IDs)	334	159	36	14	6

(1) – See RI/FS Work Plan for geochemical and physical property analyses for each media type

Results of Sampling and Tests

A portion of the sample results from RI fieldwork have been received from the laboratory. Additional sample results are forthcoming. Sample results are currently undergoing quality assessment/quality control (QA/QC) and data validation procedures in accordance with the Quality Assurance Project Plan (QAPP) (RI/FS Work Plan; Appendix C) and will be provided upon completion of the required procedures.



Description of Work Planned for Next Two Months

Work planned for November and December will consist of the following:

- QA/QC and data validation procedures will be performed in accordance with the QAPP.
- Initial assessment of site conditions and data gap analysis will be conducted using results of sampling performed during the RI fieldwork. A technical memorandum will be provided that includes sample results (summary tables and lab reports), updated figures, and an assessment of the RI results. In accordance with the schedule provided in the Work Plan, submittal of the Technical Memorandum on Initial Site Characterization (Tech Memo) is anticipated on or before January 25, 2019. Recommendations for supplemental data collection will be provided in the Tech Memo, as warranted.
- The next quarterly groundwater sampling event will be completed in late-January 2019.

Description of Problems Encountered

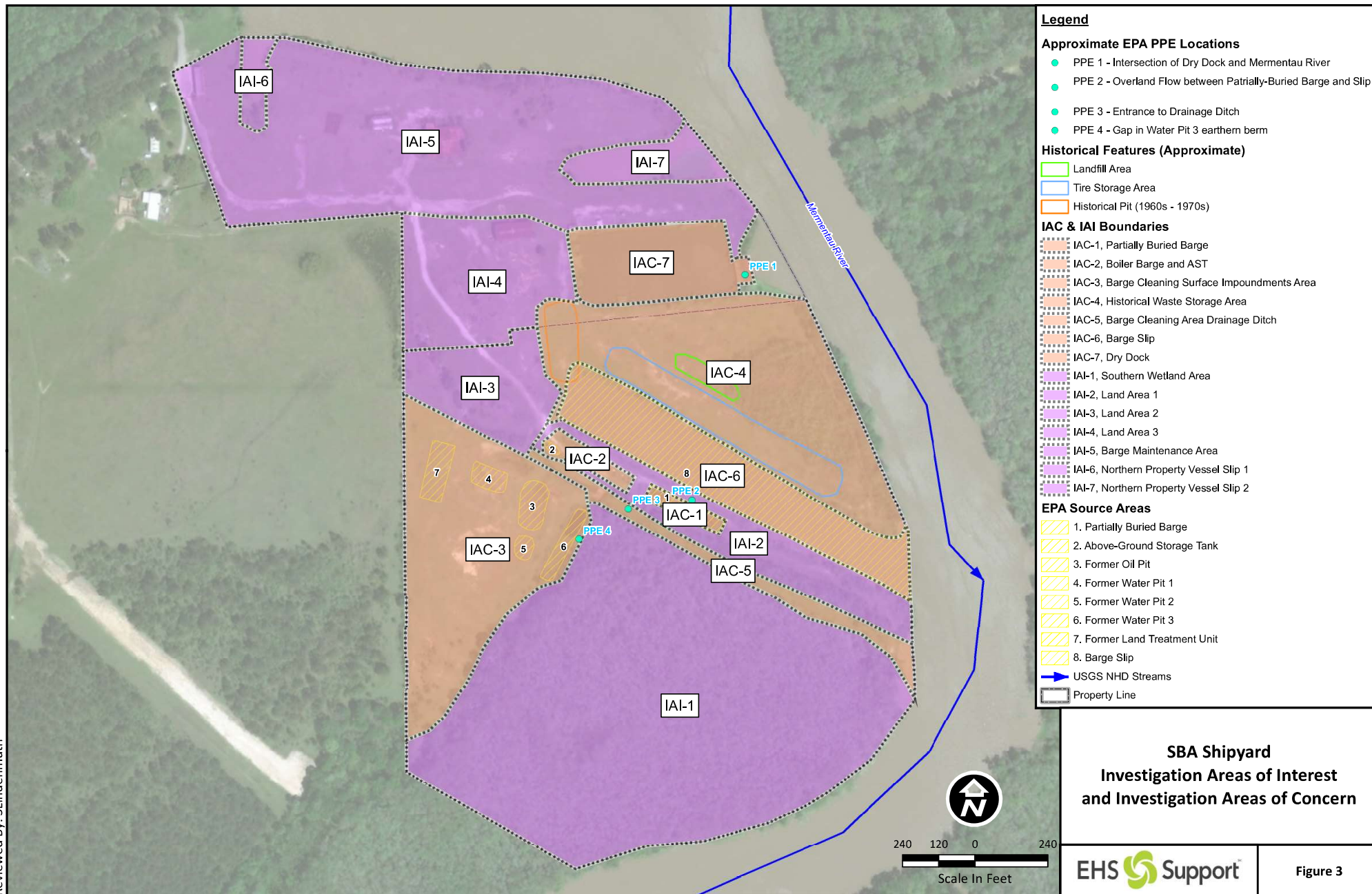
The RI fieldwork was generally completed in accordance with the Work Plan with the following exceptions:

- Sediment cores from the dry dock (IAC-7) could not be advanced to the proposed depth of approximately three feet below sediment-surface water interface due to the presence of a stiff clay material at approximately two feet below the top of sediment. The clay material was of sufficient stiffness to prevent the vibracore sampler from advancing deeper despite several attempts at various locations in the dry dock. A piston corer was also attempted and could not be advanced deeper than the vibracore sampler. The presence of the clay material was noted at all attempted locations. However, sample collection in the upper two feet of sediments was possible and completed in accordance with the sediment and surface water sampling program.
- Sediment samples were not collected from the water pit in IAC-3 due to difficulty entering the pit safely. A smaller, more mobile vessel will be used to access the water pit to collect sediment samples when field staff return to perform additional sediment sampling in the Mermentau River.
- A NAPL sample could not be collected at MW-2 due to lack of sufficient NAPL volume in the well. Previous reports had indicated several feet of NAPL present in the well; however, only one to two inches of NAPL was present in the well during RI fieldwork. MW-2 will continue to be monitored during subsequent quarterly sampling events and a sample will be collected if sufficient volume is present to fulfil laboratory volume requirements for analysis.

Enclosures
Attachment A
Attachment B

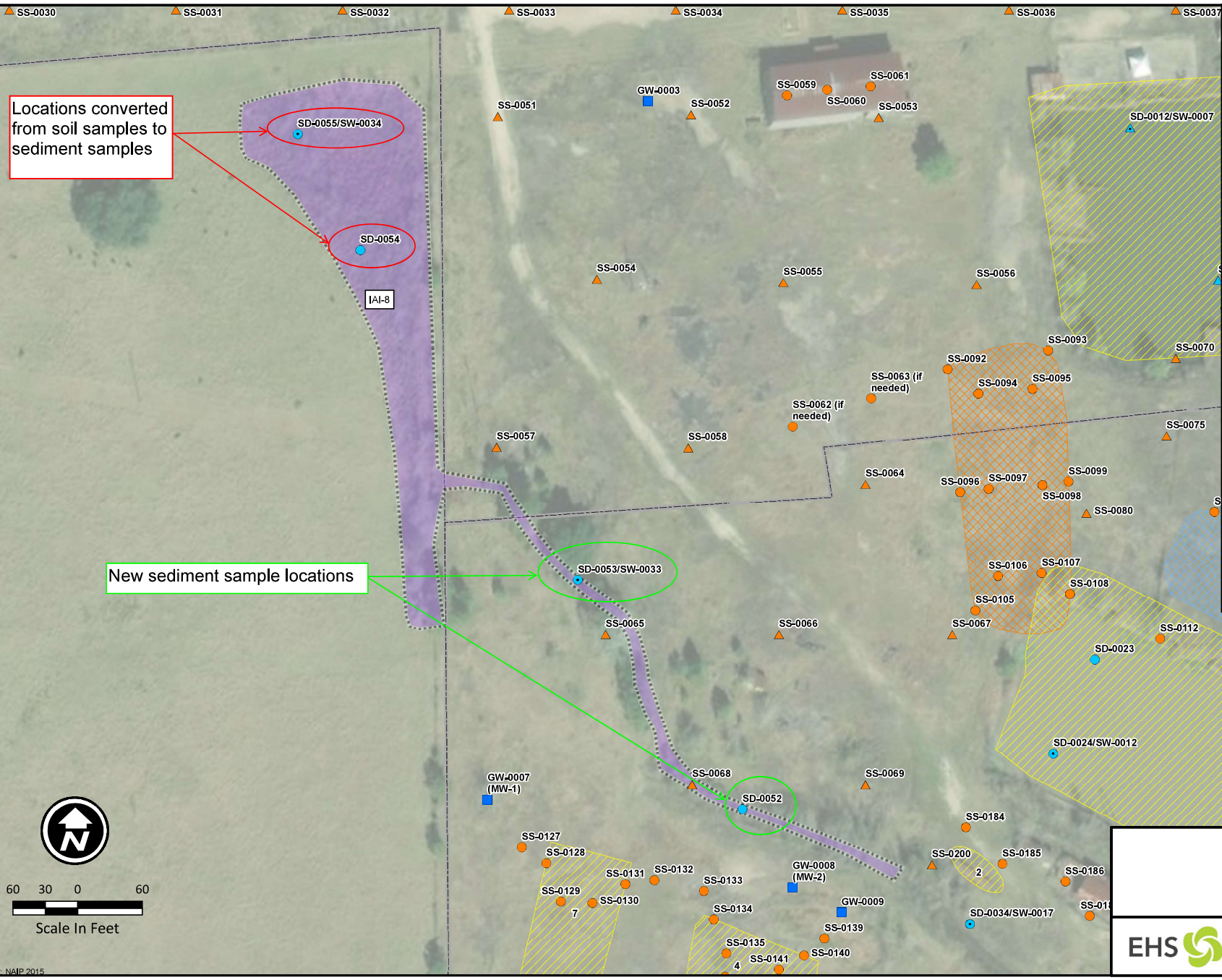


Attachment A





Attachment B



Legend

Proposed Sample Locations

- Sediment, Judgmental
- Sediment, Systematic
- Sediment/Surface Water, Judgmental
- Sediment/Surface Water, Systematic
- Soil, Judgmental
- Soil, Systematic
- Ground Water, Judgmental

Approximate EPA PPE Locations (SOW, 2016)

- PPE 1 - Intersection of Dry Dock and Mementau River
- PPE 2 - Overland Flow between Partially-Buried Barge and Slip
- PPE 3 - Entrance to Drainage Ditch
- PPE 4 - Gap in Water Pit 3 eastern berm

EPA Source Areas

- 1. Partially Buried Barge
- 2. Above-Ground Storage Tank
- 3. Former Oil Pit
- 4. Former Water Pit 1
- 5. Former Water Pit 2
- 6. Former Water Pit 3
- 7. Former Land Treatment Unit
- 8. Barge Slip
- 9. Dry Dock

Historical Features (Approximate)

- Landfill Area
- Tire Storage Area
- Historical Pit (1960s - 1970s)

IAC/IAI Boundaries

- IAC-1, Partially Buried Barge
- IAC-2, Boiler Barge and AST
- IAC-3, Barge Cleaning Surface Impoundments Area
- IAC-4, Historical Waste Storage Area
- IAC-5, Barge Cleaning Area Drainage Ditch
- IAC-6, Barge Slip
- IAC-7, Dry Dock
- IAI-1, Southern Wetland Area
- IAI-2, Land Area 1
- IAI-3, Land Area 2
- IAI-4, Land Area 3
- IAI-5, Barge Maintenance Area
- IAI-6, Northern Property Vessel Slip 1
- IAI-7, Northern Property Vessel Slip 2
- IAI-8, Offsite Wetland
- Property Line

Sample Locations
IAI-8

FIGURE 15

JEHS GIS/01060_SAS/Map/01_1_ANALYSIS/2018/002_Fields/Map/Map/Sample/FigureSeries.mxd
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